

From boatanchors@theporch.com Sat Jan 6 16:14:04 1996
From: Sandy Blaize <70401.134@compuserve.com>
Subject: "C" type connectors
Message-ID: <960106184905_70401.134_IHD57-1@CompuServe.COM>

I have the following stock of "C" connectors for thoe who are looking for same.
Some are
"NOS" in the bags, some are used and tarnished but are good.

3 ea.	UG-709	"C" male for RG-58/U cable (NOS)
1 ea.	UG-573	"C" male for RG-8/U cable (NOS)
2 ea.	UG-636	Adapter: BNC female to "C" male one used, one NOS
1 ea.	UG567	90 degree "C" adapter
1 ea.	UG-566	"Tee" "C" adapter
5 ea.	UG-568	"C" female bulkhead mount chassis connector
4 ea.	UG-565	"N" female to "C" male adapter
1 ea.	UG-643	"C" double female (barrel connector)
2 ea.	UG-642	"C" double male connector
1 ea.	???	General Radio type 874 to "C" male (Hard to get!)

I could sell, but I'd rather trade. I'm looking for: National type "B", "BM" and "N" type vernier dials in good shape. The old Bakelite knobs that were black, shaped like a squatty gumdrop about 1-1/4 in diameter with a single arrow engraved in the top (need several), National knobs that were ornate like the type used on the SW-3 receiver and some of the "B" dials. Also need National 6 pin coil sets for the SW-3 receiver or just the forms. Want FT-243 crystals in the 3.5-3.575 range. Need one of the old 5" high impedance paper cone loudspeakers (balanced armature type) in good shape.

Think they are around 2500-5000 ohms. What have you?

Looking for a small BA receiver: Hallicrafters S-53A, S-107 or National NC-88 in decent looking restorable condition. (Something that needs recapping but not total rebuilding!)

73,

Sandy W5TVW

From boatanchors@theporch.com Sat Jan 6 16:14:04 1996

From: "Garey Barrell, K4OAH" <75025.73@compuserve.com>
Subject: "N" to "BNC" Compatibility
Message-ID: <960106162210_75025.73_FHD38-2@CompuServe.COM>

There was a posting on here last week or so about just pushing a type "N" male connector into a type "BNC" connector rather than using a proper adapter. While this seems to work and "seems" to fit just fine, it is not a good practice. The problem is that the center pin of a type "N" connector is larger in diameter than a "BNC" center pin. The type "N" center pin is 0.062" dia and the "BNC" center pin is only 0.050" dia. The result is a distorted / intermittent female "BNC" receptacle if you force a type "N" connector into it. An Amphenol connector engineer told me many years ago that this practice was a major cause of intermittent BNC connector problems. He said the 30+% oversize was enough to permanently deform the BNC female. So I don't do this any more.... "Except in emergencies" !! Garey - K4OAH

From boatanchors@theporch.com Sat Jan 6 16:14:04 1996
From: "ROBERT W DOWNS, WA5CAB" <103012.2130@compuserve.com>
Subject: AN/URM-26 QUESTIONS, BA 396
Message-ID: <960106174028_103012.2130_GHU94-2@CompuServe.COM>

Paul,

As I said in my previous msg, I haven't yet read past #396. If your AN/URM-26 questions haven't been answered satisfactorily, drop me a note.

73, Robert Downs, WA5CAB
103012.2130@compuserve.com

From boatanchors@theporch.com Sat Jan 6 10:07:21 1996
From: dgf@netcom.com (David Feldman)
Subject: Attn Howard.Weeks@csranet.com!
Message-ID: <199601061556.HAA23825@netcom4.netcom.com>

My attempt to deliver the Drake file to you failed due to bad e-mail address. Go find your system administrator and yell at them, then let me know where you want it delivered!

73 Dave WB0GAZ dgf@netcom.com

From boatanchors@theporch.com Sat Jan 6 16:14:04 1996
From: "Dick Dillman" <ddillman@igc.apc.org>

Subject: BAs in L.A.?
Message-ID: <56599.ddillman@igc.apc.org>

My job will call me to L.A. next week. I'd appreciate any advice as to must-see BA emporia in the area.

Dick Dillman
WPE2VT N6VS ex-WA2BJK
<ddillman@igc.apc.org>
Collector of Heavy Metal:
Harleys, Willys and Radios Over 100lbs.

From boatanchors@theporch.com Sat Jan 6 10:07:21 1996
From: Andrew Dumas <adumas@connix.com>
Subject: Boonton #74-CS8 Capacitance Bridge
Message-ID: <199601060459.XAA18375@comet.connix.com>

Hello, all,

Does anyone in the group have any experience or comments (or perhaps a manual?) on the above piece of BA equipment?

73
Andrew Dumas
AA10X
adumas@connix.com

From boatanchors@theporch.com Sat Jan 6 10:07:21 1996
From: "Terry O'Laughlin, RM:7135, #:6-6667" <OLAUGHLIN@vilas.uwex.edu>
Subject: clogged sinks in house cleaning
Message-ID: <MAILQUEUE-101.960105211253.384@vilas.uwex.edu>

Geez. I didn't realize I had such popular stuff, either that or I priced it all too low.

I think I've replied to all first round requests. I've also replied to everyone who requested something that was sold.

If you haven't heard from me, it is because you requested something that is in the gray zone, i.e., info has gone out but the buyer hasn't responded. Please be patient. I've been swamped by replies. I won't be able to get back to my e-mail until next Weds. Things should sort themselves out by then. Thanks.

73 Terry O' WB9GVB

From boatanchors@theporch.com Sat Jan 6 10:07:21 1996
From: dgf@netcom.com (David Feldman)
Subject: Drake information file
Message-ID: <199601060018.QAA08152@netcom6.netcom.com>

A few weeks ago a person posted on Compuserve an extensive file covering Drake amateur equipment for HF. I have received a copy of the file from a friend of mine on compu\$erve, cleaned up the few minor formatting differences (content is unchanged), and would be glad to send it on to any person on this list requesting a copy by e-mail. It is now just straight text (about 70K bytes or so) that would arrive in the body of the message. The author has given permission for this kind of redistribution provided that the file is complete (it is) and attributed. So it is.

It is a very good piece of work!

73 Dave WB0GAZ dgf@netcom.com

From boatanchors@theporch.com Sat Jan 6 16:14:04 1996
From: michael.moore@24stex.com
Subject: DRAKE RECEIVER WANTED
Message-ID: <9601061036.0EW3V00@24stex.com>

Subject: DRAKE RECEIVER WANTED

This message was from LEO HEUER to ALL
originally in conference HAM on 24STEX {24th Street Exchange)
and was forwarded to you by MICHAEL MOORE

Wanted to buy:
Drake R4C Receiver in good working condition
Please call Wes Schum W9DYV - Johnson City, Tenn.
1-615-753-9714

I am posting this message for my friend who is among the FATHERS OF SSB back in the early 50's when B&W and others were coming out with ssb for hams. Wes started a company called CENTRAL ELECTRONICS which was a pioneer in ssb for the ham. He has retired from Chicago to Tennessee and would like to get back on the air.

Thanks,

Leo Heuer
W9OKF

From boatanchors@theporch.com Sat Jan 6 10:07:21 1996
From: FRANCIS4@AppleLink.Apple.COM (Francis, Dexter)
Subject: Drake SPR-4 vs. Collins 51S-1
Message-ID: <820895189.5601918@AppleLink.Apple.COM>

I promised y'all that I'd get back with a report on the performance of the Drake SPR-4 vs. Collins 51S-1B as soon as I had a chance to do some listening.

Before getting to the results, the setup is an east-west running dipole which is resonant at 12 MHz, feeding 35 feet of RG-214. I don't have a splitter/switch box, so I just ran the coax to both radios simultaneously. I used a pair of RShack NOVA 67 headphones for the audio quality comparison. (I'd checked all the tubes on the 51S-1 and replaced any that read below 80% on my meter, previously)

First the manufacturer's specs, taken from the manuals:

Collins 51S-1B	AM - 3.0 uV	10 db S+N/N	2.0 to 30 Mc.
	AM - 15.0 uV	10 db S+N/N	0.5 to 2.0 Mc.
	AM - 20.0 uV	10 db S+N/N	0.2 to 0.5 Mc.
	SSB & CW - 0.6 uV	10 db carrier,	2.0 to 30 Mc.
	SSB & CW - 3.0 uV	10 db carrier,	0.5 to 2.0 Mc.
	SSB & CW - 4.0 uV	10 db carrier,	0.2 to 0.5 Mc.
Selectivity	AM	-6db @ 5000 cps bw	
	CW	-6db @ 800 cps bw	
	SSB	-3.5db @ 2750 cps bw	

Audio output: 1 watt = 10% max distortion

Tuning range: 200 kHz to 30 MHz in 30 1 Mc. wide ranges

Frequency Stability: 100 cps for 10% variance in line voltage after 20 min.

Drake SPR-4	AM - 0.5 uV	10 db S+N/N	(30% modulation)
	SSB - 0.25 uV	10 db S+N/N	

Selectivity	AM	-6db @ 4800 cps bw
	CW	-6db @ 400 cps bw

SSB -6db @ 2400 cps bw

Audio output: 3 watts into 4 ohms

Tuning range: 150 kHz to 30 MHz in 23 500 kHz wide ranges

Frequency Stability: 100 Hz for 10% variance in line voltage after 20 min.

- - - - -
Now for the listening results: I picked out a weak AM station on 9.915 Mhz. that turned out to be the BBC. It seemed to be flanked by two CW operators. One on about 9.912 stayed around long enough for some A/B comparisons. The local time was 5:30, just after sunset. Location is 7000 ft. MSL in Colorado Springs, CO.

Neither signal ever got strong enough to bring the S-Meters off the bottom peg.

Both the SPR-4 and the 51S-1 could pick up and hold both stations.

The Drake's filters did a better job of rejecting the adjacent CW signal. I could tune out the CW operator completely with the Drake, but the Collins could not entirely eliminate it.

The Collins ALC did a better job smoothing out the fading.

There was a background ringing across the band which was always present on the Collins but no background ringing on the Drake.

As the session progressed the BBC station faded out completely. The Drake continued to pull it in. At the time the Collins lost it, BBC was fading badly on the Drake, and could not be heard as continuous voice. (The Collins lost it completely about the time that the Drake was fading badly enough to make CW unreadable.) The Drake would probably be better for chasing DX, but the Collins ALC makes it more listenable WRT fading. I still prefer the Collins frequency readout, as there is no arithmetic involved. The 23, 500 kHz wide, bands on the Drake mean it's not true general coverage.

As to audio quality, I think the Drake was more immune to background noise in this band on this night. I wasn't able to make a call between sound quality on headphones, but the Collins sounds better on my external speaker, which is a ported enclosure with an 8" Electrovoice Wolverine woofer and a RS horn tweeter.

Now, with SPR-4's selling for around \$250 and 51S-1's near three times that I suppose it's a matter of taste and checkbook capacity.

Let the flames begin...

-df

From boatanchors@theporch.com Sat Jan 6 16:14:04 1996
From: "Ray L. Mote" <rmote@rain.org>
Subject: Re: EL-2
Message-ID: <Pine.SUN.3.91.960106092208.27013D-100000@coyote.rain.org>

EL-2 (mfr is CHZ, nomenclature assigned 1942) - "Nominal power output same as EL; for use with TBO/TBX series".

The EL-1 was used with the TBX-3 (Coast Guard).

The original EL was made by General Electric in 1941, for use with TBO and TBX. "Power output: 135, 90, 15, 6, 3 VDC; 10, 5, 360 MA and two bias outputs. Operating power requirements: 115V +/- 10 percent, 60 cps +/- 2 percent, single phase, 35W".

Hope that helps. 73.....Ray Mote, W6RIC <rmote@rain.org>

From boatanchors@theporch.com Sat Jan 6 16:14:04 1996
From: Herb Holeman <choleman@ptialaska.net>
Subject: Filament supplies: Was RMS to DC conversion
Message-ID: <01BADCOA.71AC2240@juneau_5.dialups.ptialaska.net>

This thread has been most interesting, especially the tutorial about measuring RMS voltages.

This reminds me of a puzzle I saw in a magazine awhile back where the reader was supposed to calculate the RMS value of a waveform. The waveform was, as I recall, a 5 volt peak-to-peak AC sinusoid waveform with some DC superimposed, such that the top tip of the wave reached 5 volts and the bottom peak hit exactly zero volts. I'm embarrassed to report that I never did solve the problem, but I'm sure someone out there in netland can!

On a slightly different vein, I know that it's common knowledge that

vacuum tubes last much longer when operated with DC on their filaments.

The GE Mastr Pro line of two-way VHF gear used DC on the filaments and was famous for its long tube life. The theory I heard is that using AC causes a magnetic field which puts a mechanical force on the filament, perhaps causing vibration. Anybody out there have any quantitative data on this?

I do know that running DC on almost any tube receiver/audio gear gets rid of the annoying hum, which is a huge advantage.

Herb Holeman, WL7BIL
Juneau, AK
choleman@ptialaska.net

From boatanchors@theporch.com Sat Jan 6 10:07:21 1996
From: KWDouglas@aol.com
Subject: Re: foraging in my Dad's attic again..
Message-ID: <960105191043_107668589@emout04.mail.aol.com>

>It is a BC-611... classic WW2 handi-talky... see in old movies

The BC-611 has made an encore. It has been featured in recent Motorola ads in some of the trade magazines captioned something to the effect: "... Daddy was in The War". Leaning against the "big" BC-611 is a tiny Motorola cellular phone.

Kent, K9JCR
KWDouglas@aol.com

From boatanchors@theporch.com Sat Jan 6 16:14:04 1996
From: KC5IJD@aol.com
Subject: FS: Tube manuals
Message-ID: <960106122532_108216130@emout04.mail.aol.com>

Have the following tube manuals which are excess to my needs:

Microwave Tubes and Associated Components -- Raytheon	\$ 10.00
Ultra High Frequency and Pulse Techniques -- RCA	12.50
Electron Tubes, Microwave -- Raytheon	15.00
Storage Tubes -- Westinghouse	10.00
High Vacuum Pulse Tubes -- Westinghouse	10.00

All, plus shipping.

Joseph Pinner
KC5IJD
Internet: kc5ijdp@aol.com

Joseph W Pinner
Lafayette, LA
KC5IJD
EMail: kc5ijd@aol.com

From boatanchors@theporch.com Sat Jan 6 16:14:04 1996
From: "Frank Reid" <reid@indiana.edu>
Subject: Fullerphone history
Message-ID: <48976.reid@ucs.indiana.edu>

A mention of the "Fullerphone" in my recent post about military field telephones has generated a volume of mail. Here is more information:

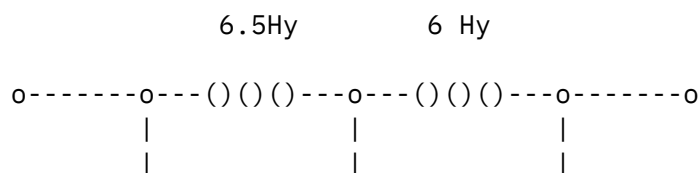
Front-line communication in World War I relied heavily upon field telephones and landline dc telegraph, both of which used single-wire lines with earth return. (Modern field phones are usually used with paired wires but are capable of single-wire/ground operation.) Deploying communication line was a dangerous job, and artillery fire quickly damaged the wires.

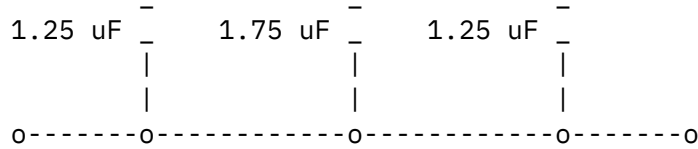
Col. Fuller of the British Army developed an ingenious device which could combine voice and telegraphy simultaneously on a single line, without mutual interference. The major advantage of Fullerphone telegraphy was that it could operate through wires having so much resistance or leakage that they were unusable for voice. It is said that it could even operate through a broken wire if both broken ends touched ground.

The voice circuit is a conventional local-battery telephone and is capacitively coupled to the line. It lacks a sidetone-suppressing hybrid network and other refinements found in WWII-vintage military field phones.

The telegraph transmitter is simply a 3v battery in series with a telegraph key. The telegraph transmitter and receiver are coupled through an LC lowpass filter which suppresses key clicks and prevents audio-frequency and ringing signals from being shunted.

Approximate schematic of lowpass filter in Fullerphone Mark IV.
Inductors have 220 ohms dc resistance.





The telegraph receiver is a sensitive earphone in series with the armature and normally-open contacts of a quiet electric buzzer. The vibrating contacts interrupt dc signals, modulating them into audio. It is extremely sensitive, yet uses no active components.

Automatic transmit/receive switching is accomplished by SPDT contacts on the key. Could this be the origin of the traditional SPDT design of British telegraph keys?

Several models of Fullerphone were produced; the later "marks" did not contain telephone components, and could be used with or without conventional field phones. Some models include an offset-voltage source for nulling galvanic effects, etc: A 1.5-volt battery with polarity-reversing switch is connected to a potentiometer in series with the earphone.

Another way of multiplexing telephone and telegraph (or two telephone channels) on a pair of wires is the "simplex" or "phantom circuit" in which the auxiliary channel uses earth-return and places common-mode signals on the pair of wires through center-tapped transformers. There are also balanced configurations using multiple pairs. (Batman has a bat phone but the Phantom has a phantom circuit! B-)

Although not intended for "wireless" communications, Fullerphone had a limited earth-dipole receiving capability. It could detect earth currents of nearby single-wire dc telegraph circuits. The Fullerphone's own current was too weak for interception by that method. The British also used Fullerphones in World War II, and Japanese forces apparently used earth-dipole equipment for communication between their underground fortifications on Pacific islands.

The opponents in WWI were sometimes able to intercept enemy telephone traffic by using battery-powered amplifiers and pairs of widely-spaced earth probes to detect audio-frequency earth currents. Operators of this equipment accidentally discovered the ionospheric VLF "whistler" phenomenon. Whistlers were initially thought to be of manmade origin because they sounded like falling bombs and shells.

I became familiar with Fullerphone through my ongoing interest in through-the-earth communication for cave exploration and rescue (see _73_ magazine, February 1984). A friend in UK has provided Fullerphone literature which he obtained from the Royal Signals Museum. I have an incomplete

Fullerphone telegraph unit. They appear rarely at US hamfests, usually in unworkable condition at inflated collectors' prices.

Other British literature describes a device called "Power Buzzer" which was used for wireless through-the-earth telegraphy in WWI. The transmitter is a large electric buzzer having a secondary step-up winding whose ends were connected to a pair of earth probes (bayonets) separated perhaps 100 yards. The receiver was an audio amplifier connected to the same "antenna." The buzzers had sets of removable armatures which produced different frequencies so that receiving operators could use their ears to select the desired signal.

The ill-fated inventor Nathan B. Stubblefield used telephone components in his experiments with inductive and earth-dipole communications. Like near-field induction, earth-dipole communication range is inherently limited by inverse-cube attenuation. Hams used audio power-amplifiers and earth probes for "ground wave" communications during WWII when ham privileges were suspended. Ranges greater than one mile were claimed.

The WWI battlefield was a harsh environment for electronics but it was probably electrically quiet. Today, ubiquitous power-line hum is a major limitation of earth-dipole communications. Power-line noise has significant harmonic content and cannot be removed by simple notch-filters. I intend to experiment with a combination of the Fullerphone and Power Buzzer principles, for dc earth-dipole communication.

Note: The expressions "earth dipole" and "earth current" are often used synonymously; some authors make the distinction that earth currents are natural or manmade, while earth dipoles are equipment used to transmit and receive them.

Literature and resources

1. Royal Signal Museum, Maj. R. Picard, curator. Blandford Camp, Blandford, Dorset DT11 8RH, Great Britain.
2. Meulstee, Louis. "Earth Current Telegraphy" *_Morsum Magnificat_* issue #9, Autumn, 1988. Mr. Meulstee (PA0PCR), of Holland, is an authority on World War I communications history and technology. *_Morsum Magnificat_* is a British journal of telegraph history.
2. *_The Fullerphone. Its action and use._* Issued by the General Staff, War Office, March 1917. Printed by Darling and Son, Ltd., Bacon Street, London. 29pp, 30 schematic diagrams.
3. *_Director of Signals Wireless Circular No. 16. Instructions for the use of the Power Buzzer_* G.H.Q., 24 April 1917. J. S. Fowler, Major General,

Director of Signals. (12 typed pages.)

4. Maynard, Fred. "Terraquaphone" _Electronics Illustrated_ Sept. 1961 p41.

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Frank Reid W9MKV reid@indiana.edu NSS 9086

From boatanchors@theporch.com Sat Jan 6 10:07:21 1996
From: "Rob Frans Sr." <frans@grfn.org>
Subject: Hallicrafters 2m conv...
Message-ID: <Pine.SOL.3.91.960105232114.22037A-1000000@freenet>

Hi.. I am new to this stuff...but, I have a Hallicrafters S-101A that has an option for a 2 meter converter to receive... Anyone out there have a converter that they are just loo[king to sell...?

Please let me know...

Thanks,

Rob Frans
KC8BAP
Grand Rapids, MI

From boatanchors@theporch.com Sat Jan 6 10:07:21 1996
From: KWDouglas@aol.com
Subject: Re: House Cleaning Part 3
Message-ID: <960105191026_107668340@mail02.mail.aol.com>

>have a HQ-180AX... modified for rack mounting... Only one like it... ?

Joseph:

In the 60's and early 70's the Indiana State Police had about 10 of the HQ-180's modified for rack mounting. The Hammarlund units were scattered around the state at about half of the Posts. They used them for the nation-wide police cw nets (and in-state cw traffic). They ended their productive lives unceremoniously destroyed at a state scrap metal dump (sob!). I can't bear to even mention the xmtrs. These were the only HQ-180's I have ever seen with the rack mount ears (sans cabinets). Other Posts had HRO-50T1's with full sets of coils in the wooden box. They suffered the same fate. Alas, the NLETS (National Law Enforcement Teletype System, via twisted pair) sealed the fate of the police HF cw nets.

Kent, K9JCR
KWDouglas@aol.com

From boatanchors@theporch.com Sat Jan 6 16:14:04 1996
From: FRANCIS4@AppleLink.Apple.COM (Francis, Dexter)
Subject: HT-32A Pwr Supply Fixed!
Message-ID: <820957616.3542516@AppleLink.Apple.COM>

Howard -

You win the prize. There was a 1500 ohm bleeder that was wide open.
I replaced it and now the plate voltage on the finals is 800.

Thanks for the suggestion.

-df

From boatanchors@theporch.com Sat Jan 6 10:07:21 1996
From: haynes@cats.ucsc.edu (Jim Haynes)
Subject: Interesting Talk by Professional CW Operator
Message-ID: <199601060715.XAA23624@hobbes.UCSC.EDU>

Our radio club tonight had as guest speaker Rod Deakin, ham and professional CW operator for the Globe Wireless station KFS in Half Moon Bay. (Actually he's their chief engineer, and also works a half day a week as a CW operator.)

First, CW is emphatically not dead. The Coast Guard has phased it out, and U.S. ships don't use it, but there are about 150,000 ships around the world and most of them still use CW. U.S. ships are about 11% of them, so maybe 89% of the ships in the world use CW. KFS has the receiver site in Half Moon Bay, the transmitter site in Palo Alto, and also operates by remote control a transmitter and receiver site in Slidell, LA. A competing company is in the same business with sites in Bolinas and Point Reyes CA, and there is a third company up in Washington. There are perhaps 50 shore-based CW operators with these stations on the West Coast and probably somewhat more on the East Coast. Marine CW may not go on forever, but the end is not in sight.

Equipment: (since that is what most BA readers are most interested in)
They have transmitters by Press Wireless that date back to WW-II. They have more modern transmitters using Henry amplifiers; and they are about

to replace those amplifiers with other Henry amplifiers designed especially for their kind of service. Transmitters these days run 5KW. They used to use 10 KW but modern receivers are better than the old ones and allow lower transmit power. For receivers they use Kenwood R-5000s in scanning mode and some old Watkins-Johnson models for copying traffic. They are getting some new receivers made by TCI and some by none other than Ten-Tec. The new receivers are entirely ASCII controlled, have no front panel controls at all. They use ASCII control with the present receivers from Half Moon Bay to the Slidell site, which is operated entirely by remote control. T-1 lines connect Half Moon Bay with Palo Alto and Slidell. I didn't catch what kinds of exciters are used with the Henry amplifiers; might have been Harris. He uses a bug or a paddle driven keyer; no keyboard-generated CW. He types the received copy on a computer keyboard. The monitor has a split screen, part for the message and part for the billing information. When they receive a message from a ship they transmit it to its ultimate destination by whatever means is available: email or Telex or voice or fax or in some cases telegraph cable. For antennas they have some log-periodics and something like discones. There's no point-to-point HF anymore so the big rhombics are gone.

In addition to CW they use SITOR and Clover. Clover uses the same modem board HAL sells to hams, but with very different firmware, intentionally incompatible with the ham version of Clover. They like Clover because of its speed and its ability to transmit binary files. These days there is a need to transmit software binary files to ships at sea. Big modern ships use INMARSAT; but there are awfully many ships that still have HF radio as their only link to the rest of the world.

A description of the operation is rather complicated. There are bands of frequencies: 500KHz and then a band in the 4MHz region, one in 6MHz, one in 8MHz, and more. For each of these bands there is a primary and an alternate frequency; and there are these pairs of frequencies for five different regions of the world and a pair for worldwide. A ship calls on one of these frequencies. The shore station transmits on one of its frequencies in the same band, and tunes the receiver to a frequency in the same band told to them by the ship. The shore station transmitters are fixed frequency; the ship transmitters move off the calling frequency to handle traffic. The scanning receivers scan the calling frequencies, usually 500 KHz, the pair of frequencies for the local area of the world, and the worldwide pair of frequencies. Because of the remote site the operator is scanning that set of frequencies locally and also scanning the appropriate set of frequencies for Slidell. Operators can set things up any way they like; his preference is for Slidell in one ear and Half Moon Bay in the other. On CW ships use call signs rather than their names. The operators typically don't know much English; but many of the messages are of a fill-in-the-blanks nature, and then with Q signals and other universally understood signals they get by.

On a 4-hour watch he will handle typically 50 messages from ships. Some of these are position reports. Ships are required to report their positions and intentions every 48 hours. This information is passed to the Coast Guard free of charge. Ships also report weather every 24 hours; and this is passed to NOAA free of charge. Other messages are mostly of a business nature and are charged for. Rates depend on the distance to the destination but might be 50 cents a word. All the rates are actually in gold francs, as an international currency. These business messages are typically to the ship's owners and report position, fuel on board, things needing repair at the next port, supplies needed, expected arrival times, and that sort of thing. Another kind of activity is for medical problems on board; they communicate with a doctor on shore and get instructions for treating the sick or injured. Very few ships carry doctors, and only those with larger crews carry a nurse. Crew members have at least first aid and CPR training. Then there are all the weird kinds of things that can happen on ships; he gave an example of a crew member who killed another. They locked up the killer, put the corpse into a refrigerated container, and asked the ship's owners whether to bury the body at sea, head for the nearest port, or complete the voyage and deal with the problem then.

Bringing a ship into port is about as involved as landing an airplane, except everything is much slower. In SF Bay the ship has to take on a pilot who is an expert at getting to the dock without running aground. If the ship arrives too early or too late it will miss its time slot for a berth and have to wait, just like an airliner having to wait for a gate. He told of one tanker ship that needed deeper water than SF Bay has even at high tide; so it had to anchor and offload the cargo into barges. Lots of messages flew around as they dealt with that problem.

CW operation is typically at 18-25 WPM. The shore operators are typically very skilled; they love operating CW and got good at it because they wanted to. Many of the ship operators are awful. They operate CW only because they get paid for doing it and don't care about being good at it. He played a tape, just for laughs, of a particularly lousy ship operator.

Then Rod got to his hobby, which is the restored Liberty ship Jeremiah O'Brien based in San Francisco at Pier 32. Right now you can't go on the ship - even the volunteer workers can't go on the ship - because of the government shutdown. But in normal times it is open 7 days a week except for a few holidays. He says the radio room is furnished with authentic gear of the period. For the \$5 admission you can spend all day on the ship if you wish, and there are docents to answer questions. Every couple of months they have a live steam day when they don't go anywhere but do get up steam and you can see all the machinery operate. They will probably go on a voyage this summer, perhaps to Seattle.

From boatanchors@theporch.com Sat Jan 6 16:14:04 1996

From: "Dick Dillman" <ddillman@igc.apc.org>
Subject: Re: Interesting Talk by Professional CW Operator
Message-ID: <45014.ddillman@igc.apc.org>

On Sat, 6 Jan 1996 01:17:09 -0600 (CST),
Jim Haynes <haynes@cats.ucsc.edu > wrote:

Thanks for the excellent update on KFS, Jim. May I add a few items based on my own interest in these operations?

I've visited KFS many times and agree that they have top-notch operators, as do most other coast stations. They seem to be able to copy solid, no matter if the RO at the other end is an ace too, or sounds like he's beating two spoons together.

At sea, KFS seems to put it a consistently better signal than KPH, even though their transmitting plant is smaller. The KFS transmitter site, by the way, is scheduled to move to Dixon but as far as I know, no date has been set.

Globe Wireless also has remote stations in Canada, Hawaii, northern Europe and perhaps elsewhere.

>A competing company is in the same business with sites in Bolinas and
>Point Reyes CA

That would of course be the ex-RCA, now MCI station KPH (originally PH for Palace Hotel - until the hotel was damaged in the '06 fire). They operate WCC (originally CC for Cape Cod) by remote control.

>and there is a third company up in Washington.

That's KLB, near Seattle. This is a one-man operation and the transmitters are all hand built by the owner.

>are perhaps 50 shore-based CW operators with these stations on the West
>Coast and probably somewhat more on the East Coast.

The only east coast station using Morse that I'm aware of (aside from WCC where there are no operators) is ex-RCA station WSC in Tuckerton, NJ. The others, such as WSL on Long Island, are long gone. Thus I think the estimate of more ops on the east coast than the west may not be correct.

>Marine CW may not go on forever, but the end is not in sight.

I suggest that any interested BA and/or Morse enthusiasts take advantage the time we have left and visit a coast station. There are several,

as mentioned, including WLO in Louisiana, one of the largest. The welcome I've received has always been a warm one and you get to see some of the best (and perhaps the last) ops in the business. It's like seeing the last of the great sailing ships or steam locomotives in action.

Dick Dillman
WPE2VT N6VS ex-WA2BJK
<ddillman@igc.apc.org>
Collector of Heavy Metal:
Harleys, Willys and Radios Over 100lbs.

From boatanchors@theporch.com Sat Jan 6 16:14:04 1996
From: Sandy Blaize <70401.134@compuserve.com>
Subject: Interesting Talk by Professional CW Operator
Message-ID: <960106213554_70401.134_IHD99-1@CompuServe.COM>

Read with interest this latest fate of the CW coastal stations. Many have cut way back on operations or just ceased to exist. We used to have many, many stations in the Gulf of Mexico area. Basically now only two exist WLO-Mobile and WNU-Slidell (New Orleans). There were stations in Galveston, Port Arthur, Tampa. They have all gone QRT. Traffic on 500 Khz is very sparse now. With the advent of Inmarsat "C" satellite terminals, a CW station has become costly to operate and operators' skills have become poorer. There are no complications "tuning up", selecting the right station and frequency, etc. as before. Even yachts and third world ships can afford the low cost "C" terminals. Installation is easy and quick. There are no large radomes like those required for "A" terminals, although you are limited to 'telex' operation only.

GMDSS (Global Maritime Distress & Safety System) is supposed to be fully implemented by 1999. With the advances in equipment design etc., I doubt if there will be any delay in this date. You can be sure, in spite of the amount of equipment in use now, that CW, as we know it, will die in the maritime industry by the turn of the century. No doubt there will be a few vestiges of it left here and there, but it will not be able to compete with the new systems. Sort of like what happened to the horse when the motor car became practical and widespread! All us old "Commercial" Radiotelegraph License types will be like the blacksmith....made obsolete by "progress".

The radiotelegraphic 'code' IS SLOW, requires skill to learn, but is still a boon for communications

between operators/parties who do not speak each other's language and uses the simplest of receivers and transmitters on each end. We old telegraphers will have to work to keep the "art" around! All this digital stuff has taken all the skill and excitement out of the 'communication' part of radio. Sorta like the newer equipment is "ho-hum" to look at inside. Yes, it's reliable and it works....well.....but, it hasn't the 'character' of the old hand wired vacuum tube stuff. Kinda like a modern diesel locomotive compared to a steam locomotive. The old steam locomotive kinda "lives and breathes". Look and listen to the wheezes, roars, hisses if you ever have an opportunity to be around a working steam engine in operation. Almost the same "spirit" seems to exude from an old piece of radio gear as the tubes glow and get warm.

CW will probably exist only in the realm of Amateur Radio in a few years. Sort of legacy we should keep alive, especially in the "boat anchor set"!

73,

Sandy W5TVW

From boatanchors@theporch.com Sat Jan 6 16:14:04 1996
From: midshires@cix.compulink.co.uk (Andrew Emmerson)
Subject: Lamp bulb replicas
Message-ID: <memo.629399@cix.compulink.co.uk>

>A while back I discovered that Henry Ford Museum sells several replicas of Edison light bulbs, and posted the information to the list. Today I discovered that Grove Enterprises also has an Edison bulb replica.

I'd like to add....

REJUVENATION, Inc., 1100 SE Grand Avenue, Portland, OR 97214, USA (+1 503 238-1900). USA's leading producer of Victorian and Arts & Crafts lighting fixtures, all from original tooling. Vast range of period (second-hand) and repro accessories, including carbon filament pip-ended bulbs. Rejuvenation has supplied many heritage buildings in the USA and everything is in the best taste. 40-page colour catalogue.

[Extract from SOUND & VISION YEARBOOK]

In fact they have at least two patterns of these carbon-filament bulbs, long and squat. I have two in my office here, connected in series since our line voltage is 240V!

--Andy.

From boatanchors@theporch.com Sat Jan 6 10:07:21 1996
From: "Allan Fritsche" <fritsche@msn.com>
Subject: Lube job of R390A's
Message-ID: <UPMAIL03.199601060045130504@msn.com>

For my two cents, When i was over in Koera, at a ASA site, I remember repairing many 390A's and what ever. We used to clean the gear cages along with Model 28 TTYcariages in the the same containers of some solution unknown to me know, After drying, we never lubed the 390's gear train ?

Question (I haven't seen the manual for almost 25 years, I mean the Field Dopt manual), Do Brass plated gear teeth need LUbE.?

I have seen a lot of guys asking about lubeing the gear train to make it smoother, What gives, The ones I worked on didnt't require anything more then cleaning
Always in search of data
Al Fritsche
fritsche@msn.com
or
attmail!!fritsche

From boatanchors@theporch.com Sat Jan 6 10:07:21 1996
From: john <johnmb@nando.net>
Subject: Mil radio/Telephone sale
Message-ID: <9601060109.AA18869@merlin.nando.net>

While leafing thru the latest issue of Shotgun News (what? Doesnt everyone?) I spotted the following ad that might be of interest:

Rx Set Radio AN/PRR-9 (Gov reconditioned)
and
TX Set Radio AN/PRT4A (Used, not abused)
shipped with antennas , lanyard, harness slide, rece3iver headset,
original manual, and batteries => 42.99 per set.
"Every set tested ready to go or we will replace it"
" Both units crystaled on 51Mhz (!) "
"Spare Battery deal \$1.00 ea, at time of order only"

No credit card or COD sales....

Also from the same company, for the fellow looking for field phones:

Telephone TA-43

2 phones, canvas carrying cases, gov reconditioned for \$54.99/set.

"We specialize in military radios and related communications equipment both used and government reconditioned". We have in stock GRC106 , T195 R-392 prr-15 rec, prc-25 KWM2a and various types of military vehicle shelters.

Jim Williams and Sons Surplus
Rear 330 Main Street
Dickson City PA
18519
717-383-1295

I have no connection whatsoever with this place other than the interesting ad! If anyone orders these, please let us know how it works out.

From boatanchors@theporch.com Sat Jan 6 16:14:04 1996
From: haynes@cats.ucsc.edu (Jim Haynes)
Subject: More on commercial marine CW
Message-ID: <199601062028.MAA28700@hobbes.UCSC.EDU>

stuff I remembered since last night's posting - and if you don't like this kind of stuff on boatanchors, well, then I think I'm through anyway.

I couldn't keep up with the names and ownerships of all the stations he mentioned. Dick Dillman has supplied some more information in that area. Rod mentioned that his company owns some non U.S. stations. The operation in Washington is about 5 people - the operators bought the station from the former corporate owner and operate it themselves. Their business is mostly with tankers to and from Alaska. It looks like what is happening in general in the business is that the former corporate owners of those stations decide that HF is finished, satellite is the wave of the future, and bail out. Then other entrepreneurs see the vast number of low-budget ships out there, and the expense of satellite communication, and start buying up and operating the HF stations.

Someone asked how they get paid, and the answer is that each ship has a billing agent, usually in the country where the ship is registered, and all the bills go to that agent. The agent pays the bills and collects from the ship owners. They don't have much trouble with deadbeat ships, because if word gets around that a ship doesn't pay then none of the shore stations will take their traffic. More often, if there is a problem with

payment, it's because the ship has recently changed billing agents and not everything has caught up with the change. And there was a problem getting paid for Russian traffic during the breakup of the USSR when the economy was in chaos; but that has been cleared up now.

Rod mentioned that the very next day after the Coast Guard discontinued CW watches on 500 KHz a ship was in trouble and was calling for help in CW. The absence of Coast Guard didn't really affect the outcome because the commercial shore stations and other ships heard the calls for help and relayed them to the Coast Guard. [and once in a while we hear of a ham or SWL hearing ship distress calls and passing the information to the C.G.]

I asked about how the operators get their training. In former days there were a number of commercial radio schools; he mentioned a famous one in California that was unfamiliar to me. Now these are all gone because there isn't enough turnover in operators to keep a school in business. Most of the operators now are former military people, or a few who get their CW skills as hams. He opined that the former Coast Guard operators are of better quality than the former Navy ones. In the former Soviet Union there were about six state-owned companies running the shipping, one company for each general kind of cargo. The radio officers attended a 4-year maritime academy and had to pass 35wpm CW to graduate. Then they worked in shore stations for about 5 years before being sent to sea. He has two former USSR operators at KFS - both of them jumped ship in the U.S. during the former regime. They are trained to send CW with their left hands and copy with their right hands at the same time. But many of the operators on ships today are from small countries where licensing standards are mediocre and training is hardly adequate.

If you want a job like this, well, then, you need to be very good at CW, have your commercial license, and hope to hear about it when some operator dies or retires. There just aren't many job openings and turnover is very low.

The TCI receivers he mentioned are maybe 7" high in a rack, and a 19" rack space holds up to four of them. The Ten-Tec receiver is in a 1-3/4" high rack mount case that is quite deep. [so probably what's inside is a single large printed circuit board, or maybe a motherboard with one layer of daughter boards] The only front panel control is an audio level setting; everything else is controlled through the ASCII interface. And they control the Kenwood receivers in Slidell through the ASCII interfaces. If you want one of the Ten-Tec receivers, they are in the \$3500 price class.

Another sea story concerned a mutiny, sort of. There was an electrician who really wanted off the ship immediately. First he sabotaged the generators but the rest of the crew were able to figure that out and fix it. Then he tried to set the cargo of naphtha on fire. This had the rest of the crew scared enough that they insisted on heading for the nearest

port to put the man off, which was not a port the ship captain had intended to go to.

A typical ship today has a crew of about 15. Some ships need larger crews. An example is a container ship that calls at many ports up and down the coast. They make so many stops at such odd hours that they need about 3 times as many crew. That is, a ship like that has crews working in 3 shifts around the clock.

From boatanchors@theporch.com Sat Jan 6 16:14:04 1996
From: "Dick Dillman" <ddillman@igc.apc.org>
Subject: Re: More on commercial marine CW
Message-ID: <62861.ddillman@igc.apc.org>

On Sat, 6 Jan 1996 14:29:31 -0600 (CST),
Jim Haynes <haynes@cats.ucsc.edu > wrote:

>stuff I remembered since last night's posting - and if you don't like this
>kind of stuff on boatanchors, well, then I think I'm through anyway.

I think it's great stuff, Jim.

>Rod mentioned that his company owns some non U.S. stations. The operation
>in Washington is about 5 people - the operators bought the station from

Indeed. What I meant to say when I mentioned it was a one man operation is that there's only one op on duty at a time - or at least that was the setup when I was there a couple of years ago.

>I asked about how the operators get their training. In former days there were
>a number of commercial radio schools; he mentioned a famous one in California
>that was unfamiliar to me. Now these are all gone because there isn't
>enough turnover in operators to keep a school in business.

I believe the Radio Operator's Union also conducted classes for a while.

>If you want a job like this, well, then, you need to be very good at CW,
>have your commercial license, and hope to hear about it when some operator
>dies or retires. There just aren't many job openings and turnover is very
>low.

True, but when I was on the phone to KFS about another matter several months ago, they mentioned they needed a sharp CW op.

Dick Dillman
WPE2VT N6VS ex-WA2BJK

<ddillman@igc.apc.org>
Collector of Heavy Metal:
Harleys, Willys and Radios Over 100lbs.

From boatanchors@theporch.com Sat Jan 6 16:14:04 1996
From: whittyd@nbnet.nb.ca (Don Whitty)
Subject: Neat Swap list...
Message-ID: <9601061802.AA25831@darwin.nbnet.nb.ca>

Been looking at a neat swap list over the last few days on the web...

It has ads from a variety of locations accross Canada as well as
a "potpourri" feed from all accross Canada that is fed in by packet.

This list (potpourri) is updated daily..

Today on the list I saw amongst other things:

75A4
S-Line
NC-125
HQ-110

Thought this page may be of interest to some....its at:

<http://www.entrepreneurs.net/dale/amp.htm>

73,

Don Whitty
VE9XX

Don Whitty
Dept. Head Distance Learning (Acting)
New Brunswick Community College
Miramichi Campus
Miramichi, NB
Canada
E1N 3W4

'-----',
 /
 0 /
 | -/
~~~~~

"Fish the Mighty Miramichi!"

whittyd@nbnet.nb.ca

(506)778-6632 (vox)  
(506)778-6690 (fax)

From boatanchors@theporch.com Sat Jan 6 10:07:21 1996  
From: Bill Meara <74537.1100@compuserve.com>  
Subject: Need 25 mhz crystal  
Message-ID: <960106093928\_74537.1100\_EHH29-2@CompuServe.COM>

Murphy has struck with a vengeance! At the only time in its 30 year life when the middle portion of its ten meter band is needed, my Drake 2-B's 25 mhz crystal has gone bad! I need the mid 10 meter band for use as an IF for an Oscar 13 receive arrangement. Anyone out there have a 25 mhz (third overtone) rock?

73! Bill N2CQR/HI8  
74537.1100@compuserve.com  
Santo Domingo, Dominican Republic  
Running: HT-37, 2-B, HW-101, HQ-100 (with SP-600  
and SX-43 awaiting repairs)

From boatanchors@theporch.com Sat Jan 6 10:07:21 1996  
From: KC5IJD@aol.com  
Subject: Re: No Address  
Message-ID: <960106095308\_108132923@emout06.mail.aol.com>

>John Shriver has drawn my attention to the fact that the message about  
>tube test gear I cross posted from rec.radio.swap was without a return  
>address. A thousand pardons! I usually look closely for that but  
>missed this one. So sorry. As John pointed out, one may of corse  
>post directly to rec.radio.swap to try to get ahold of the guy.

Dick,

I believe that you just missed his address. It is mgaidos on aol (which would be mgaidos@aol.com, of course). This was found in: From: Mark Gaidos <mgaidos>.

73

Joseph W Pinner  
Lafayette, LA  
KC5IJD  
EMail: kc5ijjd@aol.com



From boatanchors@theporch.com Sat Jan 6 10:07:21 1996  
From: Bob Roehrig <broehrig@admin.aurora.edu>  
Subject: noise silencers  
Message-ID: <Pine.ULT.3.91.960105222235.2881A-100000@admin.aurora.edu>

Thanks to Conard, Joseph, Ray, and Liles, it looks like perhaps at least the SX-28 used the Lamb silencer. I've been looking thru more QST's and also see that some outfits (like Leeds) made outboard units.

Well, I may throw one together one of these days and see what it does. I have only used one diode type noise limiter that I was satisfied with and I lost that schematic.

73 de Bob, K9EUI

From boatanchors@theporch.com Sat Jan 6 10:07:21 1996  
From: Henry van Cleef <vancleef@bga.com>  
Subject: Re: noise silencers  
Message-ID: <199601060713.BAA16080@zoom.bga.com>

As Bob Roehrig said

>  
>

> Have been looking back thru some '35 and '36 QST's and wonder if anyone  
> here has built or used one of the James Lamb type noise silencer circuits.  
> This seemed to be the big topic back then and I thought that if it were so  
> great, how come none (to my knowledge) of the commercial receivers picked  
> up on this circuit.

So far as I know, the only commercial US design that used this filter was the Hallicrafters SX-28/28A.

It is a fairly complex circuit, requiring a tuned transformer, at least one extra tube, and a mechanism in the IF for shutting down the IF during noise. The SX-28 circuit used a 6L7 in the IF, but I suspect that suppressor modulation of a 6SK7 or 6BA6 would work. As I recall, the transformer has to be a center-tapped IF.

Terman and Langford Smith both give a cursory description of the circuit, but do not discuss its characteristics in any detail, nor do they give enough information for one to select circuit parameters.

--

\*\*\*\*\*  
Hank van Cleef vancleef@bga.com vancleef@tmn.com  
\*\*\*\*\*

From boatanchors@theporch.com Sat Jan 6 16:14:04 1996  
From: George Hamner <73514.1103@compuserve.com>  
Subject: Re: Noise Silencers  
Message-ID: <960106164224\_73514.1103\_EHT58-1@CompuServe.COM>

In addition to the SX-28, I believe that the optional "LS-1 Noise Supressor" for the RME-69 was the James Lamb type noise silencer. This unit was a small sub-chassis which was arranged to plug into the sockets formerly occupied by the two 6D6 IF amplifier tubes. The LS-1 consisted of a 6K7, 6L7, 6J7, and a 6H6. The schematic is found in Riders Vol. X.

Can anyone validate if the LS-1 is the Lamb design?

-----  
George Hamner  
73514.1103@compuserve.com

From boatanchors@theporch.com Sat Jan 6 16:14:04 1996  
From: "ROBERT W DOWNS, WA5CAB" <103012.2130@compuserve.com>  
Subject: R-392 PLUG BA 396  
Message-ID: <960106174024\_103012.2130\_GHU94-1@CompuServe.COM>

Rich, et al,

The 9-pin female power/control plug for the R-392/URR is 164-44FS (Amphenol) or UW1220FB17 (Frank - the 17 is the cable gland size). The much more common 164-201-3S(nn) fits every other Military BA that used those plugs except the R-392, which is unfortunate.

I have one extra UW1220FB17 that I'll part with for \$25.00 plus shipping.

BTW, in the course of discussions (and a little cussing) recently with another collector over the solder which I discovered on the pins of a set that I had bought, I was surprised to discover two things; (a) he had no idea how expensive new metal-shelled connectors are today, and (b) he didn't know how easy it is to disassemble AN, MS and Cannon 'K' series connectors for the pins or sockets by removing the snap-ring from the rear with a jeweler's screwdriver. The only ones that won't come apart are the 'E' series which have molded rubber inserts.

While it's not that difficult to remove the solder from solid pins, it's virtually impossible to do on the banana types found on Command Sets, BC-375's, etc. Armed with a handful of assorted pins and sockets, making up a temporary cable is actually easier than soldering to the pins. Put heat shrinkable tubing over each contact, and if you can locate a compatible plug body (usually easier than finding the plug itself), put it over the whole mess to keep from accidentally unplugging the wires, and to make it look 'right'.

Also, Gene at Tartan Electronics had some 2-wire power cables (NOT the dog-bone) with the correct connector for the R-392 a while back. I think that he was getting \$30.00 each, but I don't know whether he still has any.

73, Robert Downs, WA5CAB  
103012.2130@compuserve.com

From boatanchors@theporch.com Sat Jan 6 10:07:21 1996  
From: Scgilstrap@aol.com  
Subject: R390A w/meters and covers  
Message-ID: <960105191739\_32978062@mail06.mail.aol.com>

The R390A that I had ordered from Fair Radio and had shipped to my kid brother arrived at his home earlier this week. I had bought a "checked" unit and as I mentioned here last week, the unit was to have original meters. Well, it does have the meters and covers to boot. My brother told me that it came with full vented covers top and bottom. I hadn't expected that. He said it was in great shape cosmetically and he was almost ecstatic about the performance so I do believe he got a good 'un. It is an Electronics Assistance Corporation (EAC), s/n 943, order no. 23137-PC-60. He told me the Carrier Level meter didn't glow in the dark and it looked older than the Line Level Meter. I asked him if the Line Level meter glowed in the dark and he said "Hell, it glows in the light!" Maybe he should avoid leaning over the radio.

He's using a Hallicrafters R-46 speaker with the thing and was wondering if that was a close enough match at 500 ohms impedance for the R390A. Is anyone else using an R-46 speaker with their R390A? Seems to me that it should work out ok. I could hear the radio squawking and growling in the background over the phone last night so it must work pretty good.

Also, he wanted me to ask if anyone would know when this radio would have

been manufactured. From his description it doesn't sound like it has much mileage on it.

This was my first purchase from Fair Radio and it seems like we got a good unit. I wonder where they get all those R390A's?

73,

Stan - WB5LBH

From boatanchors@theporch.com Sat Jan 6 10:07:21 1996  
From: robert fowle <hammarlund@voyager.net>  
Subject: rack mount hq-180's  
Message-ID: <199601060543.AAA23285@vixa.voyager.net>

>In the 60's and early 70's the Indiana State Police had about 10 of the  
>HQ-180's modified for rack mounting

the HQ series from the HQ-120x, to the HQ-180-A, was always available with the "rack" option. i.e. HQ-180AXR 'r' being the "rack" designator. very hard units to come by. the option was an expense that many felt un-needed.

Just some trivia for the group.

Robert Fowle  
the HAMMARLUND historian  
Ph. 517-789-6721  
E-mail: Hammarlund@vixa.voyager.net

From boatanchors@theporch.com Sat Jan 6 10:07:21 1996  
From: "Roberta J. Barmore" <rbarmore@indy.net>  
Subject: RE: RMS to DC Conversion and Measuring AC Voltages  
Message-ID: <Pine.3.89.9601052209.A26363-0100000@indy4>

Hi!

I've been following Barry, Hank and the other real-engineering folks contributions to this thread with interest (and learning a lot, too!).

A couple of quick side-notes:

1. uA723's are fine little regulators, but \*do\* read what the data sheet has to say if you're not used to them--especially the parts about bypassing and circuit layout. They're a pretty early IC device and can do impressively goofy things if one does not play by their rules. Even very clever designers have been burned by this; one of the better professional audio processors of the last decade liked to start howling thanks to a

design glitch and the fellow who designed it was no slouch. Despite that, it's a versatile and handy device if properly used.

2. Do take time to peruse the published dope on three-terminal regulators (uA78nn/79nn and the similar LM340-nn or 320-nn, LM317, 337, etc. [warning, the 340/320 numbers are from memory--National functional equivalents to the Fairchild devices]). There are some nice tricks that can be done with them--the variable (317/337) ones in particular can be configured as current limiters, pass transistors can be wrapped around them for high-current loads, and they can be "cheated" up with Zeners in the common terminal to regulate higher voltages, to name just a few. National has a nice databook on these and other power-supply topics. Don't skip proper bypassing with these, either. A pair of .1uFs at the input and output terminals will usually do the trick.

73,  
--Bobbi

From boatanchors@theporch.com Sat Jan 6 10:07:21 1996  
From: Oxyura@aol.com  
Subject: Re: RMS to DC Conversion and Measuring AC Voltages  
Message-ID: <960106084508\_84757672@mail02.mail.aol.com>

Gary,

Last September I found this information for a fellow incandescent lamp enthusiast. I would presume it would apply to vacuum tubes as well, even though they operate at a lower temperature.

\*\*\*You mentioned something about operating your old lamps on D.C. I found this bit of information in the catalog of Chicago Minature Lamp, Inc., Buffalo Grove, IL.

"The reduction in lamp life from D.C. operation is from filament 'notching'. The Tungsten surface becomes very irregular after burning, appearing very faceted from the formation of notches at grain boundaries. These notches reduce the filament diameter at various points, creating hot spots, and faster evaporation and reduced filament strength become the dominant factors influencing reduced lamp life. Filament notching is predominant with fine wire filament lamps with operating temperatures that are lower than that for significant normal Tungsten evaporation. Because of this, operation at a [D.C.] voltage lower than rated voltage usually does not yield the increase in life normally expected."

They also say "lamps operating in parallel on 60 cycle alternating current....some increase in life performance can be expected if the voltage across the lamp is below rated voltage."

"Shortened life can be expected if lamps operate ...in series, ...in a circuit where there is a series resistance or a voltage exceeding rated voltage."

Thought I would pass it along. I was suprised when I read that D.C. can actually reduce lamp life.\*\*\*\*

William Lund  
oxyura@aol.com

From boatanchors@theporch.com Sat Jan 6 10:07:21 1996  
From: Ronald Steinberg <rhstein@interaccess.com>  
Subject: South Bend Hamfest  
Message-ID: <199601060443.WAA24085@flowbee.interaccess.com>

I,ll be heading to the South Bend hamfest on Sat evening and  
be monitoring the UNOFFICIAL ba freq. 147.51 for other BAs  
on sat and sun. The first round of "807s" is on me on sat eve.

RON K9IKZ

|               |                 |                         |
|---------------|-----------------|-------------------------|
| Ron Steinberg | K9IKZ           | rhstein@interaccess.com |
|               | 512 S Cherry    | Itasca Il 60143         |
|               | 708 773 3583 hm | 708 773 0822 hm fax     |
| At work:      | rentcom@mcs.com | http://www.rentcom.com  |
|               | 708 678 7000 wk | 708 678 9378 wk fax     |

From boatanchors@theporch.com Sat Jan 6 10:07:21 1996  
From: "Allan Fritsche" <fritsche@msn.com>  
Subject: Still looking for a R46B speaker  
Message-ID: <UPMAIL03.199601060045150907@msn.com>

I sure would like to find an R-46B speaker in the Houston area.

Thanks for the Bandwith

Al Fritsche  
937--6044

From boatanchors@theporch.com Sat Jan 6 16:14:04 1996  
From: aevang@cris.com (alevangelista)  
Subject: TBK? Help  
Message-ID: <199601062139.QAA22455@franklin-fddi.cris.com>

A number of years ago I helped my dad scrap a shipboard transmitter. It was about the size of a large refrigerator and covered 2 - 18.1 MC. I believe that it was a TBK or perhaps a TBY (I think the manufacturer was either Westinghouse or GE).

On a recent trip home I found one of the control pannels and have since concluded that it would make a dandy wall ornament for the shack. It is about 12 inches high by 30 inches wide. The features from left to right are as follows:

1. A control knob with multi-turn dial labaled:  
"Antenna Tuning Inductance" and "K",
2. a 3 inch diameter hole for a meter,
3. below the meter hole is a label for a 2 position  
switch (knob missing) "Antenna Feed" "Voltage Current",
4. a raised screw-on cover with a glass window with  
a "Keying Relay" label,
5. control knob containing the labels:  
"Antenna Tuning Capacitor" and "J",
6. a 3 inch diameter hole for a meter,
7. below the meter hole is a slot for the frequency  
range control. (knob missing)  
labels: "L" and "Frequency Range..."
8. a control knob with multi-turn dial labaled:  
"Antenna Coupling" and "H".

The only keepsake which I tried to hold on to from this beast was the ID plate which (of course) is long gone!

I would greatly appreciate hearing from anyone who may be able to provide me with any insight into this item. I also need help in identifying or obtaining items 2,3,6 or 7. Anyone happen to have a TBK? id plate looking for a good home?

73,

Al Evangelista (KB8WYN)

From boatanchors@theporch.com Sat Jan 6 10:07:21 1996  
From: Sandra L Knepper <slkst29+@pitt.edu>  
Subject: Trivia:Collins Mechanical Filters  
Message-ID: <Pine.3.89.9601060855.H23720-0100000@unixs2.cis.pitt.edu>

For those who may be somewhat perplexed about the ad by Yaesu advertising the inclusion of Collins mechanical filters in their new Yaesu FT-900T, I was told after some investigation that these are truly Collins mechanical filters that are being manufactured in Mexico by Rockwell International.

What a difference a name can make! Its nice to know that Yaesu appreciates a good thing when they see it; however, one cannot think that this some kind of marketing strategy capitalizing on the Collins name.

How many of you out there saw the advertisement for the new Rockwell-Collins 95S receiver?

Dave, W3BJZ

From boatanchors@theporch.com Sat Jan 6 10:07:21 1996  
From: "C. J. Hawley Jr." <hawley@aries.scs.uiuc.edu>  
Subject: Re: Trivia:Collins Mechanical Filters  
Message-ID: <30EE9966.1263@aries.scs.uiuc.edu>

Sandra L Knepper wrote:

> How many of you out there saw the advertisement for the new  
> Rockwell-Collins 95S receiver?  
>  
> Dave, W3BJZ

Tell us more.

Where?

\$10K?

Chuck, KE9UW



From boatanchors@theporch.com Sat Jan 6 10:07:21 1996  
From: TOM.A.ADAMS@mail.admin.wisc.edu  
Subject: USCG rack mount rcvrs.  
Message-ID: <G15M0520.G15M0530@mail.admin.wisc.edu>

to: boatanchors@theporch.com

Greetings.

I haven't seen any rack mounted USCG HQ-180s, but I have a USCG WRR-3 (duty post unknown) that had what I thought was a pretty ingenious, and well made, homebrew rack mounting adaptor.

Somebody took a 19" wide slab of .25" aluminum sheet, and cut out a hole in the center to fit the radio (not an easy task to do well because the WRR-3 has rounded corners. The curves that were cut in the panel fit perfectly).

To retain the utility of the rack rails, a pair of aluminum angle rails were made for the top and bottom of the panel which were drilled to fit holes in the cabinet. This allowed the panel to safely handle the prodigious weight of the radio, yet let it slide out on the side rails for maintenance.

The radio pokes out of the panel about 1.5 inches (ie, the front panel casting clears when the cabinet is buttoned up).

Nothing flimsy about this mount at all, and you'd swear it was a factory accessory unless you saw the back side of it; this thing was clearly built of stuff salvaged off the shop scrap heap.

To some unknown USCG machinist's mate, I tip my Stetson and say "Bravo! Well Done!".

73's,

Tom, K9TA

From boatanchors@theporch.com Sat Jan 6 10:07:21 1996  
From: TOM.A.ADAMS@mail.admin.wisc.edu  
Subject: Re: variac spec & line  
Message-ID: <G15L0628.G15L0638@mail.admin.wisc.edu>

to: boatanchors@theporch.com

Hello Grant.

Maybe I can save you a couple of bucks here by suggesting an alternative to the big variac.

Big filament transformers are a hell of a lot cheaper, and they can be used for the "boost / buck" trick that is in the older editions of the ARRL Handbook in the power supply section.

You simply hook up the transformer to the AC line as usual, but tie one end of the low voltage winding to the AC line. The rig is then connected to the other side of the transformer (ie, line), and to the "cold" end of the filament winding.

Depending on the filament winding phasing, the voltage will then be the line voltage + filament winding voltage, or line voltage - filament winding voltage. Flip filament winding leads to change phasing.

In the case you cite (125 VAC), using a 6.3 VAC filament transformer will give you either 131.3 VAC, or 118.7 VAC, depending on filament winding phase.

See the ARRL Handbook for further details. They usually show this trick being applied to a variable toy train transformer.

73's,

Tom, K9TA

From boatanchors@theporch.com Sat Jan 6 16:14:04 1996  
From: Herb Holeman <choleman@ptialaska.net>  
Subject: Variac specs and line voltage  
Message-ID: <01BAD09.BD414E20@juneau\_5.dialups.ptialaska.net>

Grant Youngman wrote:

>...I was contemplating acquiring a 20 amp Variac to run most of the BA gear....

Here in the great white north our line voltage runs about 122-125 VAC most of the time. My efforts to convince the local power utility to cut it down have been unsuccessful, so I decided to get off my duff and do something about it, keeping in mind that BA gear was designed to run on 110 to 115 VAC and that running it on 124 VAC drastically shortens tube filament life.

Having a couple of old variacs around--one rated 10 amps, another newer one rated 20 amps; both are about the same physical size, surprisingly. I looked around for a suitable mounting container and decided that an old p-c power supply chassis box was just the right size to house the variac, and had an input power connector (H-P type) on it just waiting to be reused!

A few hours with a drill and a nibbling tool resulted in the addition of a duplex outlet, two fuse holders and the variac mounted securely in the box.

**\*\*Be sure to install fuses on both the input and output of the variac.\*\***

The input fuse seems obvious enough, but the output fuse is mandatory.

Imagine a scenario where you're servicing an old BA, but there's a short in it somewhere. You connect the BA to the variac with the voltage set to zero and bring it up slowly. The variac is a transformer, remember, and the output current when feeding a short could easily exceed the variac rating and would toast the wire on your expensive variac!!! You'll get static from your "significant other" because it doesn't smell nice, either.

All of this could easily happen without blowing the fuse on the input side of the variac. I've been saddened to see more than one nice variac which has been ruined in this manner. If you spy one at a flea market, give it a visual inspection and reject any with a blackened winding.

To answer your other question about derating.... Variacs are electrical power devices and as such can be used at their full rating under continuous service. The important thing to remember is the temperature rise, which is sometimes mentioned on the nameplate, but is often 40 degrees C. If you mount your variac inside a box where ventilation is poor, better check it frequently if you're pushing the ratings!

In my shack all BA gear, especially test equipment, runs off the variac at around 110 VAC and seems very happy. Good luck and keep us posted.

73,  
Herb Holeman, WL7BIL  
Juneau, AK  
choleman@ptialaska.net

From boatanchors@theporch.com Sat Jan 6 10:07:21 1996  
From: Gale Carlisle <gcarlisl@c1n.etc.bc.ca>  
Subject: variac/3 phase  
Message-ID: <Pine.3.89.9601051801.A14318-01000000@c1n>

The 3 phase variac that I have had the pleasure to use consists of 3 (three) separate 0-120 volts @ 20 amps but can be wired for about 135 volts out. This unit is made by General Radio and called AUTOTRANSFORMER model W20G3M . I use 2 sections for 220 volts on high voltage power supply and the other on the bench. I seen one of these units listed for sale at FORD SURPLUS for about \$80.00 CDN. , a real deal for US customers.

Steve Carlisle VE7AHL

From boatanchors@theporch.com Sat Jan 6 10:07:21 1996  
From: Bill Meara <74537.1100@compuserve.com>  
Subject: Vibroplex Parts Available  
Message-ID: <960106093922\_74537.1100\_EHH29-1@CompuServe.COM>

I have some parts from a Vibroplex bug that might be useful to somebody fixing up an old one. I have the center (axial) portion of the bug - the long assembly that wiggles from side to side. I also have the weight on the end and a variety of other Vibro-parts. Free to a good home. Let me know.

73! Bill N2CQR/HI8  
74537.1100@compuserve.com  
Santo Domingo, Dominican Republic  
Running: HT-37, 2-B, HW-101, HQ-100 (with SP-600  
and SX-43 awaiting repairs)

From boatanchors@theporch.com Sat Jan 6 10:07:21 1996  
From: whittyd@nbnet.nb.ca (Don Whitty)  
Subject: Want D-104 and relay (dow-key??)  
Message-ID: <9601060259.AA26444@darwin.nbnet.nb.ca>

I am looking for a mic for my Johnson Ranger I. I have been advised that a D-104 is perhaps the most popular and accesible solution...

As well, I am looking for a relay (dow-key) or something else that will accomplish the job of switching the antenna between my Ranger I and HRO-60.

Please respond with comments, availability and price to:

Don Whitty  
VE9XX  
whittyd@nbnet.nb.ca

note: the race is on to have this station operational for the classic radio exchange!

Don Whitty  
Dept. Head Distance Learning (Acting)  
New Brunswick Community College  
Miramichi Campus  
Miramichi, NB  
Canada  
E1N 3W4

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"Fish the Mighty Miramichi!"

whittyd@nbnet.nb.ca
(506)778-6632 (vox)
(506)778-6690 (fax)

From boatanchors@theporch.com Sat Jan 6 16:14:04 1996
From: DrHydro@aol.com
Subject: which is it- 51J-3 or R-388?
Message-ID: <960106120644_84820158@emout06.mail.aol.com>

Not long ago, I picked up a receiver from a local ham who was cleaning out his BA closet- he said it was a 51J-3. No nameplate, but someone had put a Dymo tape on the bakelite dial plate saying "51J-3"- the only date on it is an MFP date of Aug 1952 ink-stamped on the chassis rear next to the antenna connector. Frequency range is 0.5 to 30.5 Mc. The radio has various Navy anchors ink-stamped - on the VFO and inside the chassis. There are two sets of four tapped holes on the front panel above the dial for nameplates, one set centered, one set just to the right. Black crackle front panel. The aluminum top cover has a schematic for R-388/URR on its underside, and is NOT covered with the yellowish MFP coating that the rest of the chassis is- which indicates to me that it's not the original. The tube complement etc. on that schematic does match what's in the radio, both designations and tube types.

All the alignment tools and spline wrenches are present. Seems to work fine, but might benefit from some alignment attention. Has not been hacked up, though the top cover has had a minibox mounted and there's a cable running to it marked "VFO out" with an RCA plug.

I'm not familiar enough with these things to be able to pick up what's what..... so,

Questions-

1. Which is it- 51J-3 or R-388? How do I tell?
2. How desirable is it relative to an R-390 or R-390A? (Been thinking about picking one of those up either from Fair or Toronto Surplus)
3. What's it worth?
4. What would the second nameplate have been? And- does anyone have appropriate nameplates for this thing that could be restored?

Any info would be appreciated.....

Paul Nelson
Ames, Iowa

"When I go, I want to go quietly in my
sleep, like my grandfather..... not
screaming, like his passengers."

drhydro@AOL.com

From boatanchors@theporch.com Sat Jan 6 16:14:04 1996
From: KC5IJD@aol.com
Subject: Re: which is it- 51J-3 or R-388?
Message-ID: <960106122530_108216111@mail04.mail.aol.com>

- >1. Which is it- 51J-3 or R-388? How do I tell?
- >2. How desirable is it relative to an R-390 or R-390A? (Been thinking
>about picking one of those up either from Fair or Toronto Surplus)
- >3. What's it worth?
- >4. What would the second nameplate have been? And- does anyone have
>appropriate nameplates for this thing that could be restored?

1. 51J-3 = R-388
51J-4 = R-388A (this set has mechanical filters)
2. Many folks think that it is the equal of the R-390. The R-390A has
mechanical
filters and, to me, is superior in that respect. I think that the
R-388 is
easier to work on. Some R-388s experience a bad problem with PTO
aging such
that you cannot adjust the end points properly, i.e., ten turns of
PTO =
1 Mc frequency change. Some don't, though.
3. Depending on condition, I would say \$ 75 - 250.
4. Likely the R-388 nomenclature plate.

73

Joseph W Pinner
Lafayette, LA
KC5IJD
EMail: kc5ijd@aol.com

From boatanchors@theporch.com Sat Jan 6 10:07:21 1996
From: "Manuel A. Maseda WF1J" <mmaseda@Packet.Net>
Subject: WTB: KWS-1 Power Supply
Message-ID: <30EDC2F3.5AFF@packet.net>

Looking for a Collins power supply to go with my KWS-1 (actually a
KWS-1K). Anyone got an extra one they want to sell?

Manuel WF1J

From boatanchors@theporch.com Sat Jan 6 16:14:04 1996
From: "ROBERT W DOWNS, WA5CAB" <103012.2130@compuserve.com>
Subject: Re: [1] SCR-522 test meter BA 396
Message-ID: <960106174032_103012.2130_GHU94-3@CompuServe.COM>

Jerry,

My apologies if this is a dupe. I got behind over Christmas. KD6KWH, Henry Engstrom's latest list had I-139-A listed @ \$10.00. P.O. Box 5846, Santa Rosa, CA 95402 (707)544-5179.

73, Robert Downs, WA5CAB
103012.2130@compuserve.com